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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/593,028	09/15/2006	Hiroshi Uehara	055053-0110	5744
	7590 10/05/200 LARDNER LLP	EXAMINER		
SUITE 500	TNW	CHIN, HUI H		
3000 K STREET NW WASHINGTON, DC 20007			ART UNIT	PAPER NUMBER
			1796	
			MAIL DATE	DELIVERY MODE
			10/05/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/593,028	UEHARA ET AL.
Office Action Summary	Examiner	Art Unit
	HUI CHIN	1796
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the c	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statut-Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed on <u>06 J</u> This action is <b>FINAL</b> . 2b) ☐ This      Since this application is in condition for allowed closed in accordance with the practice under the practice.	s action is non-final. ince except for formal matters, pro	
Disposition of Claims		
4)  Claim(s) <u>1-9</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdra 5)  Claim(s) is/are allowed. 6)  Claim(s) <u>1-9</u> is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and/o	wn from consideration.	
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E	cepted or b) objected to by the I drawing(s) be held in abeyance. See tion is required if the drawing(s) is objection	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
<ul> <li>12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documen</li> <li>2. Certified copies of the priority documen</li> <li>3. Copies of the certified copies of the priority application from the International Burea</li> <li>* See the attached detailed Office action for a list</li> </ul>	ts have been received. ts have been received in Applicationity documents have been receive au (PCT Rule 17.2(a)).	on No ed in this National Stage
Attachment(s)  1) \( \sum \) Notice of References Cited (PTO-892)	4) ☐ Interview Summary	(PTO-413)
2) Notice of References Cited (PTO-692) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate

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## **DETAILED ACTION**

1. The office action is in reference to the Amendment, filed on <u>7/6/2009</u>. Claim 1 has been amended. Claims 1-9 are now pending.

2. In view of the Response, the previous rejections of claims 1 under 35 U.S.C. 102(b) as being anticipated by <u>Tasaka et al.</u> (JP 2002-322321), and claims 2-9 under 35 U.S.C. 103(a) as being unpatentable over <u>Ahmed et al.</u> (US Patent 6,184,291) in view of <u>Tasaka et al.</u> (JP 2002-322321) are withdrawn.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1, 3-6, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tasaka et al. (JP 2002-322321).

Tasaka et al. disclose an elastomer composition comprising: a) 100 parts by weight of at least one elastomer selected from the group consisting of a block copolymer comprising at least two of a polymer block A mainly consisting of an aromatic vinyl compound and at least one of a polymer block B mainly consisting of a conjugated

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diene compound, a hydrogenated block copolymer which is a hydride of the block copolymer and an olefinic copolymer rubber, b) 0.1-250 parts by weight of an amorphous polyolefin, c) 1-100 parts by weight of an oil, and d) 1-100 parts by weight of an olefin system, wherein the block copolymer is styrene butadiene styrene (SBS); the copolymer rubber is ethylene-1-butene; and the olefin system is atactic polypropylene (claims; [0025]; [0034]; [0043]; [0048]). Attention is directed to Example 6, wherein it demonstrates a composition comprising 35 parts by weight of SBS, 45 parts by weight of ethylene-butene rubber, 17.5 parts by weight of oil, 17.5 parts by weight of paraffin, and 20 parts by weight of polypropylene. The ratio of melt flow rates and molecular weight distribution are inherent properties.

However, <u>Tasaka et al.</u> are silent on the specific amount of 1-butene in the ethylene/1-butene random copolymer. The specific amount of 1-butene is dependant on the ratio of ethylene to 1-butene in the random copolymer. By adjusting the ratio of ethylene to 1-butene the hydrophobicity and branching will be affected. By increasing the amount of 1-butene the hydrophobicity will be reduced and the branching will be increased. The case law has held that "a particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation". *In re Antoine*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to achieve the relative amount of 1-butene via the routine optimization process and thereby obtain the present invention.

The limitations of claims 3-5 can be found in <u>Tasaka et al.</u> at [0079], where it discloses molding operations.

The limitations of claim 6 can be found in <u>Tasaka et al.</u> at [0079], where it discloses multilayer goods.

The limitations of claim 9 can be found in <u>Tasaka et al.</u> at [0079], where it discloses household appliance.

4. Claims 2, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Tasaka et al.</u> (JP 2002-322321) in view of <u>Ahmed et al.</u> (US Patent 6,184,291).

The disclosure of <u>Tasaka et al.</u> is adequately set forth in paragraph 3 and is incorporated herein by reference.

<u>Tasaka et al.</u> disclose the at least one styrene block copolymer is styrene/butadiene/styrene ([0003]). However, <u>Tasaka et al.</u> are silent on the specific density, MFR, and a molecular weight distribution of ethylene/1-butene random copolymer.

Ahmed et al. disclose an elastomeric composition comprising: a) from about 70 to about 90 percent by weight of a styrene triblock copolymer, b) from about 10 to about 30 percent by weight of an ethylene interpolymer characterized as an interpolymer of ethylene with at least one  $C_3$ - $C_{20}$   $\alpha$ -olefin wherein this interpolymer is ethylene/1-butene having a density of about 0.875 g/cm3 to about 0.905 g/cm3, an MFR of about 1 to 10 g/10 min, and a molecular weight distribution of about 1.5 to about 2.5 (claims 1, 2, col.

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6, lines 13-18; col. 9, lines 12-16; col. 11, lines 46-47; col. 12, lines 4-5, and lines 37-38), and Ahmed et al. further disclose the use of extender oils (col. 15 lines 53-55), to provide a thermoplastic elastomeric compositions comprising block copolymers in blend combination with substantially inert ethylene interpolymers (col. 1, lines 23-26). This composition can be fabricated into articles such as fibers, films, coatings and moldings (col. 15 lines 65-66). In light of such benefit, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use this specific ethylene/1-butene random copolymer with the expected success.

## Response to Arguments

5. Applicants' arguments filed 7/6/2009 have been fully considered and are not persuasive.

The arguments have been addressed in the rejections above.

## Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUI CHIN whose telephone number is (571)270-7350. The examiner can normally be reached on Monday to Friday; 8:00am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ling-Siu Choi/ Primary Examiner, Art Unit 1796